

CLAIMS

What is claimed is:

1. An image fixing device of an image forming apparatus comprising:
a pressure roller;
a heating member; and
a heating roller, the heating member being installed therein, to rotate with the pressure roller to fix a developed image to a fed paper by applying heat generated by the heating member, wherein the heating roller is a heat pipe of a closed tube type.
2. The image fixing device according to claim 1, wherein the heat pipe of the closed tube type forms a closed space therein and has a fluid inside of the closed space.
3. The image fixing device according to claim 1, wherein the heating member is an induction heating body to generate a magnetic field in the heating roller.
4. The image fixing device according to claim 1, wherein the heating roller rotates separately from the heating member.
5. An apparatus comprising:
a roller to rotate about an axis to fix a toner image to a paper, the roller comprising an outer surface having a uniform surface temperature in a direction of the axis.
6. The apparatus according to claim 5, further comprising:
a heater to heat the outer surface to the uniform surface temperature.

7. The apparatus according to claim 6, wherein the roller further comprises:
an outer conductor forming the outer surface; and
an inner conductor to form a space with the outer conductor.
8. The apparatus according to claim 7, further comprising:
a working fluid in the space.
9. The apparatus according to claim 8, wherein the heater heats the working fluid in the space.
10. The apparatus according to claim 9, wherein the heater is a heating coil, and the inner conductor generates heat in response to a change in a magnetic field generated by the heating coil.
11. The apparatus according to claim 10, wherein the working fluid changes phase according to the heat generated by the inner conductor.
12. The apparatus according to claim 9, wherein the roller rotates separately from the heater.
13. The apparatus according to claim 12, wherein the heater is stationary and the roller rotates.
14. The apparatus according to claim 13, wherein the heater and the roller rotate in opposite directions.

15. The apparatus according to claim 11, wherein the phase changed working fluid is circulated within the space.
16. An image fixing device of an image forming apparatus comprising:
a pressure roller;
an induction heating coil; and
a heating roller, the induction heating coil being installed therein, to rotate with the pressure roller to fix a developed image to a fed paper by applying heat generated by the induction heating coil, wherein the heating roller is a heat pipe of a closed tube type.
17. An image forming apparatus, comprising:
a first roller to form an electrostatic latent image thereon;
a developer to develop the electrostatic latent image;
a second roller to transfer the developed image to a recording medium; and
a fixing device to fix the transferred image to the recording medium, comprising:
a roller to rotate about an axis to fix a toner image to the recording medium, the roller comprising an outer surface having a uniform surface temperature in a direction of the axis.